DOC'S FRIENDS, INC.

Revised: 03/22/2022

B-29 DOC 469972 GENERAL OPERATIONS MANUAL

Doc's Friends, Inc.
Wichita, Kansas
2022 Edition

Operations Manual System

Doc's Friends, Inc., is a 501c3 non-profit board managing the operation of the Boeing B-29 Superfortress known as Doc.

This manual, and the policies and procedures herein, has the primary focus of:

1. To provide for and ensure a safe operating environment for B-29 Doc and its crew, volunteers and passengers;

2. To establish policy and procedures to be followed by all flight and ground personnel, as well as all volunteers and representatives of Doc's Friends, Inc.; and

3. To ensure compliance with all applicable FARs and FAA Exemption No. 107779A, as amended

The mission of Doc's Friends is to ***HONOR*** the men and women who sacrificed so much for the freedom of others, including those who designed, built, maintained and flew the B-29 during and after WWII. ***CONNECT*** people with the rich heritage of the B-29 and allow aviation enthusiasts to experience the thrill of a B-29 up close. ***EDUCATE*** todays and future generations on the contributions of the Greatest Generation during wartime.

It is the intent and commitment of Doc's Friends, Inc., and all who represent the organization, to establish and promote a culture of safety at all times and throughout the entire organization. Safety and compliance is a key factor in the overall success of the long-term mission to ensure B-29 Doc is able to be enjoyed by generations to come.

At all times, this document will be considered the official and legal operating terms and procedures of Doc's Friends, Inc. Additionally, this document will be maintained and continually updated, as necessary, to maintain our commitment to safety and standardization.

All concerns regarding this manual should be submitted in writing to either the FAA or Doc's Friends, Inc., directly.

Sincerely,

Josh Wells
Executive Director and General Manager
Doc's Friends, Inc.

Record of Revisions and Changes

Revision Number	Page of Revision	Date of Revision	Reason for Change	Inserted by
Original	N/A	06/12/2018		JW
Rev. 1	N/A	7/18/2018		JW
Rev. 2	Rev. 2	3/1/2021	Full edit and revision	JW
Rev. 3	Page 6	3/22/2022	Staff changes	JW

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CHAPTER 1
Foreword, Purpose and Personnel

This manual establishes Doc's Friends, Inc., (DFI) procedures and policies for B-29 Doc Flight and Ground Operations Personnel that are acceptable to the Federal Aviation Administration (FAA). This manual will be kept current with revisions as necessary. One copy of the manual will be maintained in current form at the principal operations base. All DFI flight, ground and maintenance personnel must use this manual in the conducting of all operations.

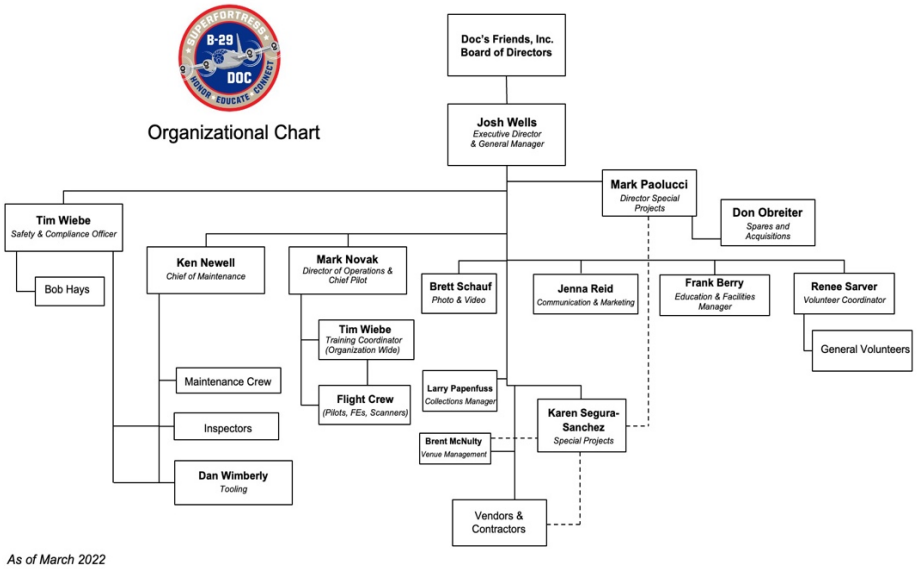
DFI will provide the Wichita Flight Standards District Office (ICT FSDO) of the Federal Aviation Administration with a current and complete copy of this manual. The Executive Director or designee will furnish the FAA with all changes and additions to this manual in a timely manner acceptable to the ICT FSDO.

A current and complete copy of this manual will be carried on board the B-29 at all times. While away from the home maintenance base, the Pilot in Command (PIC) will make this manual copy available to ground and flight personnel for their use. The Director of Operations/Chief Pilot, Safety and Compliance Officer or designee will ensure that the copy of the manual assigned to the aircraft are current and complete.

This manual was written in conjunction with the applicable FARs and FAA Exemption No. 107779A (DFI's Living History Flight Exemption), as amended. It is the intent that procedures in this manual are in line and support of all applicable FAA regulations. In the event a conflict arises between the FARs, FAA Exemption No. 107779A as amended, and DFI policies and procedures, the applicable FARs take precedent unless the procedures in this manual are more restrictive, in which case they take effect. It is required to bring any such conflict to the attention of the Director of Operations and/or Safety and Compliance Officer for correction. All DFI B-29 Doc flight crew and operations personnel must become familiar with this manual.

Leadership Team Personnel
Doc's Friends, Inc., has appointed the following leadership team and reporting order in the organization:

Organizational Chart



Duties and Responsibilities

Each of these people has the authority to act for DOC'S Friends, Inc., and, in their respective roles, exercise operational control. Their specific duties and responsibilities are:

Executive Director

1. Has full oversight and responsibility, and directly supervises the team to oversee all Doc's Friends, Inc., activities and crewmember responsibilities.
2. Ensures that all flight operations are conducted safely and in compliance with all Federal Aviation regulations, operations manual and corporation policies.
3. Instills and promotes a culture of safety throughout the organization.
4. Has authority to act for the corporation, including the signing of FAA correspondence and operations specifications.
5. Communicates with the FAA Flight Standards District Office (FSDO) and the National Transportation safety Board (NTSB). Files all required reports and documents.
6. Devises revisions to this manual as needed, submits the proposed revisions to the FSDO, receives confirmation from the FSDO that the revisions are acceptable, and then distributes those revisions to all manual holders.
7. Creates and/or approves flight schedule with the Director of Operations and schedules aircraft availability with the Chief of Maintenance to ensure required inspections are completed.
8. Coordinates with the Chief of Maintenance to ensure the timely correction of mechanical irregularities and discrepancies.
9. No later than 72 hours prior to commencing flight operations under the terms of Exemption No. 107779A, DFI must notify the geographically responsible FAA FSDO where it intends to conduct flight operations and shall provide a copy of their exemption to them upon request.
10. Qualifications: Individual must be familiar with Doc's Friends, Inc. operations and FAA general procedures, and is appointed by the DFI Board of Directors.

Director of Operations / Chief Pilot

1. Reports to the Executive Director.
2. Supervises flight crew personnel and makes recommendations to Executive Director on flight and ground instructors.
3. Supervises all training activities of flight crew personnel through the Training Coordinator.
4. Advises the Executive Director regarding the training of flight crew personnel.
5. Assists the Executive Director in formulating operations policies, coordinates those policies, and coordinates operations and training.
6. Ensures that the aircraft is properly equipped for applicable operations.
7. Disseminates information to all crewmembers pertaining to routes, airports, NOTAMS, NAVAIDS, company policies and regulations.
8. Coordination with Executive Director and Chief of Maintenance for all flight schedules, assigning of crew members and all duties set forth in CFR Part 91 as it relates to Pilot in Command (PIC) duties.
9. Coordinates with Safety and Compliance Officer, Chief of Maintenance and Training Coordinator to maintain proficiency records, pilot files, flight schedules, duty time records, reports, and correspondence pertaining to flight operations activities.
10. Ensures that all certificated flight crew personnel are current and supervised according to the

requirements specified in the appropriate CFR.

11. Qualifications: Maintains currency as Pilot-in-Command and Check Airman in the B-29, a minimum of Commercial Pilot Certificate, Multi-engine Rating, Instrument Rating and B-29 authorization.

Chief of Maintenance

1. Reports to the Executive Director.
2. Is responsible for all maintenance and inspection personnel.
3. Ensures that the B-29 is maintained in an airworthy condition.
4. Ensures that all inspections, repairs and component changes are accomplished in accordance with manufacturers or FAA approved procedures.
5. Ensures compliance with maintenance procedures, Airworthiness Directives, Technical Service Orders and applicable Federal Aviation Regulations (FARs).
6. Ensures all maintenance technicians are trained and current on the B-29.
7. Ensures that all maintenance technicians are certified or supervised according to the requirements specified in the FARs.
8. Coordinates with maintenance contracting agencies, if applicable, when maintenance activities are being performed on the B-29.
9. Provides the Executive Director and Director of Operations with the current airworthiness status of the B-29 and the forecast down times to facilitate maintenance scheduling and insure timely deferral or correction of aircraft discrepancies.
10. Maintains a close liaison with manufacturer's representatives, parts supply houses, repair facilities and the FAA.
11. Makes available to maintenance personnel the necessary overhaul manuals, Technical Service Orders, Airworthiness Directives, applicable sections of this manual and any other required technical data.
12. Maintains all necessary work records and logbooks, including certification in the aircraft permanent maintenance records that the aircraft is approved for return to service.
13. Maintains the weight and balance records for the aircraft.
14. Completes and views permanent aircraft records, (logbooks) and Aircraft Discrepancy Worksheet (ADW) for accuracy. Any changes to the airworthiness of the aircraft will be reported to the Executive Director for forwarding to the FAA.
15. Qualifications: A&P with a minimum of two years work experience on the B-29 and an understanding of the appropriate FAA CFR, as well as the Living History Flight Exemption (LHFE) No. 107779A reguirements.

Safety and Compliance Officer

1. Reports to the Executive Director.
2. Is responsible for monitoring the execution of and amending, as needed, the Doc's Friends, Inc., Safety Management System (SMS).
3. Trains flight crewmembers, maintenance and ground operations personnel on the SMS.
4. Develops and implements safety systems for the aircraft operations department personnel to ensure a safe and healthful work environment.
5. Promotes a positive safety culture throughout the organization.
6. Addresses all safety concerns in a timely manner.
7. Prepares and submits all safety reports to the Executive Director.
8. Monitors and ensures all safety reports and fully investigated and outcomes are installed

and/or implemented.

9. Advises management of recognized hazards and unsafe/unhealthful working conditions.
10. Periodically assesses Safety Program effectiveness and compliance.
11. Provides information on hazard and risk analysis; defines and establishes a procedure for risk management.
12. Evaluates available training resources; advises management concerning training requirements, methods and sources.
13. Processes Hazard and Incident Reports gleaned from the VADRP collection box for the purpose of identifying and eliminating or mitigating workplace hazards.
14. Oversees and collaborates with any incident, safety report or accident investigation.
15. Disseminates safety-related information.
16. Performs periodic safety audits.
17. Qualifications: Experience and knowledge in aviation safety and FAR requirements.

Pilot Policy

The Executive Director will be notified annually of pilots eligible to fly the DFI B-29. No pilot will operate the B-29 without authorization by the Executive Director and Chief Pilot or designee.

Pilot in Command (PIC)

- MUST hold Commercial, Multi-engine Land Certificate and Instrument rating, an Experimental aircraft authorization by make and model on their pilot certificate; and appropriate medical certificate.
- PIC hour requirements: At least a total of 2,500 hours of aeronautical flight experience, 1,000 hours of aeronautical flight experience in multiengine land airplanes, and 25 hours and 25 landings in a B-29; or have at least a total of 1,500 hours of aeronautical flight experience, 300 hours of aeronautical flight experience in a multiengine land airplane, and 50 hours and 50 takeoffs and landings in a B-29
- Have accomplished within the previous 90 days, three takeoffs and three landings in a B-29. For initial PIC qualification in the B-29 or if the pilot has allowed his/her takeoff and landing currency to lapse in the B-29, the takeoff and landing currency may not be accomplished during Exemption No. 107779A operations (LHFE), as amended.

Second in Command (SIC):

- MUST hold at least a Commercial Multiengine Land Certificate and Instrument rating; and appropriate medical certificate.
- Have at least a total of 1,500 hours of aeronautical flight experience, 200 hours of aeronautical flight experience in multiengine land airplanes; or have at least a total of 500 hours of aeronautical flight experience, 250 hours of aeronautical flight experience in multiengine land airplanes.
- Have accomplished within the previous 12 calendar months (FAR 61.55), three takeoffs and landings to a full stop in a B-29 for which SIC privileges are sought. For initial SIC qualification in the B- 29 or if the pilot has allowed his/her takeoff and landing currency to lapse in the B-29, the takeoff and landing currency may not be accomplished during Exemption No. 107779A operations (LHFE), as amended

Check Airman/Authorized Instructor

1. B-29 Doc flight instructors shall be designated by the Director of Operations or a current and qualified FAA Specialty Aircraft Examiner (SAE with B-29 listed on their COA (Certificate of Authority).
2. Must have at least two years of experience as PIC in a B-29.
3. Must be current CFII / MEI or have military multi-engine instructor experience.
4. Must have a type rating in the B-29 and be highly knowledgeable in the aircrafts operation, systems, and limitations.
5. Must also have a minimum of 150 hours flight experience in the B-29.
6. Must also be knowledgeable about Cockpit Resource Management (CRM), FAA regulations, NTSB requirements and FAA Exemption No. 107779A, as amended.

All Pilots

1. All pilots will maintain currency per DFI Operations Manual requirements, and will report updated credentials and certifications to DFI as soon as they are amended.
2. All pilots will be encouraged to voluntarily report any safety concerns, hazards, violations, or deviations from approved procedures or regulations through DOC'S Friends, Inc., Voluntary Anonymous Disclosure Reporting Program (VADRP) in accordance with FAR 5.71(7). VADRP reporting is a crucial element of the SMS/Just Culture effort. In addition to addressing immediate concerns, the VADRP is a tool for all members of the DFI organization to help share past experiences and best-practices.
3. Pilot training will occur every 12 months in the B-29 and periodically throughout the year by classroom and/or computer-based training to coincide with the DFI qualification program and to share any threats that have been identified through the Safety Management System (SMS) and VADRP.

Non-Pilot Crew

Flight Engineer

1. Must hold an FAA Flight Engineer Certificate for reciprocating aircraft with proper training in the B-29.
2. Maintain currency in accordance with 14 CFR 91.529 or FAA directives.
3. Obtain annual check-ride for currency by the FAA or FAA designee.
4. Must be able to meet agility and strength demands for aircraft operation and servicing. These include climbing on top of the wing and nacelles. It is desirable that the Flight Engineer have an A&P Certificate, but this can be waived with concurrence of the Chief of Maintenance or DFI leadership designee.
5. Must be thoroughly familiar with the emergency procedures as they pertain to the B-29 aircraft and duties as flight engineer.
6. Must understand the array of instruments, levers and switches to control the output and condition of the engines. Must understand the operating functions of the power plants so that the power producing temperatures, pressures and forces applied are within limits.

Scanners

NOTE: Scanner qualification is based on competency, not the number of training flights.

1. Must be physically and mentally capable of performing all duties required of their positions in a timely manner.

2. Have had initial and on-the-job training in the scanner position.
3. Complete annual ground school training as administered by Doc's Friends, Inc.

Air Operations Policy

1. A pilot is authorized to land the DFI B-29 only when the runway meets or exceeds the limitations of the Aircraft Handbook and is clear of aircraft and other obstacles.
2. Flight training is prohibited during Exemption No. 107779A LHFE operations.
3. Passengers are not allowed to manipulate the aircraft flight controls.
4. Formation flights are prohibited during Exemption No. 107779A LHFE operations.
5. Abide by minimum flight altitude and visibility requirement as listed in Exemption No. 107779A LHFE operations.
6. Aerobatic demonstrations are prohibited during Exemption No. 107779A operations.
7. DFI can conduct takeoff and landing during waivered operations when coordinated with the Air Boss of the event.
8. Follow and abide by all FAA operating limitations for B-29 44-69972, as well as limitations established in Exemption No. 107779A

Duties for Flight

Pilot in Command

1. Determines that he/she is adequately rested
2. Plans flight assignments and obtains information regarding purpose of the flight, weather, operating procedure and special instructions.
3. Prepares or supervises preparation for each flight, considering such factors as altitude, terrain, weather, range, weight, cruise control data, airport facilities and navigational aids.
4. Ensures proper flight equipment, charts and materials required are onboard the B-29 prior to departure.
5. Supervises or accomplishes the aircraft FAA and/or military flight plans or forms.
6. Assures proper loading and security of passengers. Determines that aircraft weight and balance is within prescribed limits, reviews Aircraft flight Log and ensures that a copy of each Aircraft Flight Log and Load Manifest is delivered to the Chief of Maintenance or Safety and Compliance Officer for filing upon the completion of the flight assignment.
7. Ensures provisions for passenger comfort and any special emergency equipment required.
8. Retains final responsibility for logging of aircraft flight time, filing and closing of flight plans and preparation of his/her flight record.
9. Must be highly knowledgeable of the DFI Operations Manual, FAA Regulations, NTSB Procedures, FAA Exemption, Aircraft Handbook and all other material pertinent to his/her duties.
10. Shall assign a crewmember or passenger prior to departure to assist any person who may need the assistance of another person during possible emergency evacuation of the aircraft.
11. Shall conduct the briefing of all passengers in accordance with FAA requirements and in accordance with FAA Exemption No. 107779A, as amended, prior to each take-off. The briefing shall also include the use of safety belts, safety equipment on the aircraft, the precautions that need to be taken while moving around during flight and the location of all emergency exits. He/she may delegate this duty to additional personnel but retains responsibility.

12. Before permitting a person to be carried on board the aircraft for the purposes authorized under Exemption No. 107779A, DFI will inform that person of the Experimental Airworthiness Certificate held and the significance of that certificate as compared to a Standard Airworthiness Certificate.
13. Shall assure all aircraft operations are conducted utilizing proper checklist procedures.
14. When operating away from the home facility, a Pilot in Command will notify the Director of Operations/Chief Pilot of any discrepancies with the aircraft and review related details of the operation. The Safety Officer will be consulted if any safety concerns are present.

Second in Command

1. The Second in Command is administratively responsible to the Director of Operations and functionally responsible to the Pilot in Command of the flight to which he/she is assigned.
2. The Second in Command of the aircraft, in the event of an accident or incident whereby the Pilot in Command becomes incapacitated, the Second in Command shall assume the duties and responsibilities of the Pilot in Command and conduct the remainder of the flight to a safe landing.
3. Shall be familiar with the duties and responsibilities of the Pilot in Command.
4. Shall perform those duties stipulated throughout this General Operations Manual and specific responsibilities designated to the SIC by the Director of Operations and/or the Pilot in Command.
5. May delegate duties to other personnel or passengers when acting under instructions from the Pilot in Command or in the event the Pilot in Command becomes incapacitated.
6. Must be highly knowledgeable of the General Aircraft Operations Manual, FAA Regulations, NTSB Procedures, Operations Specifications, Aircraft Handbook and all other material pertinent to his/her duty position.

Flight Engineer

1. Flight Engineer will assist PIC / SIC with duties as assigned during flight. Duties may include but are not limited to assisting flight crew with checklists, emergencies, passengers and evacuation of aircraft.
2. Accomplishes Pre-flight inspection, checks engine oil and fuel, determines that the condition of the aircraft is satisfactory for flight and completes required DFI documents.
3. Is familiar with all documents required to be on board aircraft.
4. Is in charge of fuel management, from determining the proper fuel load for the mission to keeping the aircraft in proper balance during the flight; this is a shared responsibility with the PIC.
5. Is in primary control of the engine power management. All engine operating factors must be adjusted so that the maximum efficiency of the engines are realized, while protecting the engines from failure.
6. Preforms weight & balance calculation and Takeoff & Landing data cards for the PIC's review.
7. May conduct the passenger briefing prior to aircraft boarding at the discretion of the PIC.
8. Completes post flight inspection and completes required DFI documents.
9. Assists with ground operations and ramp safety.

Scanners

1. Must be physically and mentally capable of performing all duties required of their positions, in a timely manner.
2. Perform alternate/emergency extension of main landing gear and flaps.
3. Install, remove and stow ladders, landing gear down locks and chocks.
4. Assist in pre-flight and post-flight inspections when requested by flight engineer or pilot in command.
5. Assist in servicing fuel and oil when requested by flight engineer or pilot in command.
6. Ensure passengers are seated with seat belts fastened prior to departure and landing.
7. Assist passengers with limited mobility or medical situations.
8. Understand the location and how to use all emergency equipment.
9. For engine start, act as Fire Guard or perform Long Line duties, as requested by flight engineer or pilot in command.
10. Perform visual checks and monitor all airplane components and flight control systems, such as flaps, engines, and landing gears during flight and report any irregularities to PIC/SIC.
11. Monitor exterior surroundings during takeoff, flight, landing and taxi operations and report any irregularities or potential hazards to the PIC/SIC.
12. Monitor movement of passengers, including proper use of seat belts, and safety procedures, and report conditions to PIC/SIC.

Lead Scanner

1. Must be recommended to assume "Lead Scanner" designation by Director of Operations or designee.
2. Minimum of six flights as a qualified scanner.
3. Assists with preflight briefing, as requested by PIC; and ensures proper completion of forms and passenger manifests. This process may be completed by DFI ride desk personnel or designee

Ground Operations Personnel

1. Trained in ramp safety procedures, including passenger and visitor safety when ramp is active.
2. Assist with securing aircraft on ramp.
3. Assist with passengers loading as requested by flight crew.
4. Assist with flight manifests and passenger forms.
5. Serve as Fire Guard or Long Line as requested by flight engineer or pilot in command.

Chapter 2
Operational Control

Operational control is defined in FAR 1 as "the exercise of authority over initiating, conducting and terminating a flight." Operational Control is exercised through both active and passive means. Passive control consists of developing and publishing policies and procedures for operational control for operational control personnel and flight crews to follow in the performance of their duties and assuring adequate information and facilities are available to conduct the planned operation. Active control consists of making those decisions and performing those actions necessary to operate a specific flight such as crew scheduling, reviewing weather, NOTAMs and flight planning.

1. Doc's Friends, Inc. (DFI), is responsible for ensuring that both flight crews and operational control personnel comply with published policies and procedures.
2. Operational Control systems vary with the type of operation authorized. In accordance with the DFI policy, the major responsibility for operational control is with the Chief Pilot. The Chief Pilot may delegate the active control of flight to the Pilot in Command (PIC), but always retains full responsibility.
3. Operational Control includes, but is not limited to, the performance of the following functions.
    a. Ensuring that only crewmembers trained and qualified in accordance with the applicable regulations are assigned to conduct a flight.
    b. Designating a Pilot-in-Command (PIC) for each flight.
    c. Providing the flight crew and flight control personnel access to the information necessary for the safe conduct of the flight (such as weather, NOTAMs, airport information).
    d. Specifying the conditions under which a flight may be conducted (weather minimums, flight planning, airworthiness of aircraft, aircraft loading and fuel requirements), as stated in 44-69972 operating limitations and Exemption No. 107779A, as amended.
    e. Ensuring that each flight has complied with the specified conditions before it is allowed to depart.
    f. Monitoring the progress of each flight and initiating timely actions when the flight cannot be completed as planned, including diverting or terminating a flight.

CHAPTER 3
Safety Management System (SMS)

Safety Management System (SMS)
The Doc's Friends, Inc. (DFI), Safety Management System (SMS) is unique due to the nature of our operations. It is a single aircraft system with volunteer personnel operating and maintaining the aircraft in accordance with DFI policies and FAA Regulations. Like other SMS programs, the goals are the same: **To build a culture of safety and safe operational practices throughout the organization.**

The Pilot in Command (PIC) and/or Flight Engineer will report the flight description and all data, along with any irregularities of mechanical operation or safety related issues on the flight log at the end of each flying day for each flight logged during the day. The reports generated, and actions taken will be used to determine whether the flight and maintenance departments are meeting our safety performance commitment. The Compliance and Safety Officer will monitor the completion of these reports and any outcomes, providing a monthly safety briefing to the Executive Director, Director of Operations and the Chief of Maintenance. These reports will be logged and kept in records retention.

The Compliance and Safety Officer, with input from the Executive Director, Director of Operations and the Chief of Maintenance may recommend and implement changes to the Operations Manual, training manuals or the SMS to ensure an equivalent level of safety throughout the organization following the implementation of any safety report or flight log. Open communication is vital to our safety program and the Safety and Compliance Officer shall coordinate the appropriate changes to any manual or policy.

Voluntary Anonymous Reporting (VADRP)
Voluntary reporting of issues or discrepancies found during maintenance, ground handling, or flight

is encouraged. The DFI VADRP system will be based on anonymous reports submitted into the Safety Comment Box in accordance with FAR 5.71(7), that is monitored by the Director of Safety and Compliance. Reports received will be investigated and acted upon by the Safety Committee. Filing of Aviation Safety Reporting System (ASRS) Reports are also highly encouraged.

CHAPTER 4
Training

Training Conditions

1. Pilots will receive annual ground and flight training on the B-29 conducted by the Director of Operations/Chief Pilot, Training Coordinator, Chief of Maintenance and other training instructors as deemed appropriate by DFI.
2. Pilots will receive annual training on topics that may include, but are not limited to, the SMS Manual, General Operations Manual, DOC Aircraft Handbook, maintenance reporting procedures, weather limitations, currency requirements, general procedures and lessons learned, emergency evacuation procedures and other topics as needed.
3. Pilots will receive an annual flight check in the B-29 that participates in Exemption No. 107779A, as amended, Living History Flight Exemption (LHFE). Check rides will be conducted by an authorized Check Airman.
4. Flight Engineer / Crew Chief will receive annual training as mandated by the Exemption No. 107779A, which may include the operations manual, SMS program, DOC Aircraft Handbook, aircraft systems and maintenance discrepancy reporting procedures, ground operations, flight operations and emergency evacuation procedures.
5. Flight Engineer will receive an annual flight check by the FAA or FAA designee.
6. Scanners will receive annual training relative to their duties, which may include the Operations Manual, SMS program, Aircraft Handbook, aircraft systems, flight operations and emergency evacuation procedures.
7. Maintenance personnel will participate in annual training that may include but is not limited to an IA refresher course, DFI operations manual, Aircraft Handbook, SMS program, and topics related to the B-29, maintenance discrepancy reporting procedures and ground operations. Training will be given by the Chief of Maintenance.
8. Ground operations personnel will receive annual training, which shall include the SMS program, items related to ramp safety and security, marshalling, aircraft towing procedures, fueling procedures and passenger/visitor safety issues. Training will be given by the Director of Maintenance.
9. The Safety and Compliance Officer will provide annual training on the SMS program for DFI operational personnel and review the pertinent safety recommendations and recent changes to the program.
10. The Safety and Compliance Officer will maintain the training records and ensure currency and of all DFI personnel.
11. The Training Coordinator and Safety Compliance Officer will have oversight on all training programs for all members of the organization.
12. Executive Director will provide annual training on organization overview, safety culture, crew expectations, volunteer involvement and overall administration.

Pilot Requirements

Currency, Reporting and Evaluations

1. All pilots will maintain currency per DOC'S Friends, Inc., Operations Manual requirements and will report any changes to their credentials or certification as soon as possible to DFI.
2. All pilots will be encouraged to voluntarily report any safety concerns, hazards, violations, or deviations from approved procedures or regulations through DOC'S Friends, Inc., Voluntary Anonymous Disclosure Reporting Program (VADRP). Pilots are encouraged to fill out a ASRS form to coincide with Doc's Friends, Inc., VADRP.

Pilot Evaluation

1. In order to serve as a qualified pilot, each pilot must successfully accomplish initial and recurrent training with a successful evaluation in practical skills and best practices for operation of the B-29. ***See Appendix A.***
2. Pilot evaluations will occur annually in the aircraft and periodically throughout the year by classroom and/or computer-based training to coincide with the DOC'S Friends, Inc., qualification program and to share any threats that have been identified through the Safety Management System (SMS) and VADRP.

Maintenance Training

DFI will maintain its Experimental category B-29 with the maintenance requirements as specified in accordance with 14 CFR 91.409 (F)(4), an FAA Approved Aircraft Inspection Program that has been developed and incorporated to maintain the airworthiness of the B-29. Aircraft specific training will be held every 12 months and will include DFI procedures and best practices, on the job training and classroom review. Training will also include any limitations that the Exemption No. 107779A (LHFE) as amended, requires. ***See Appendix A.***

Documents and Records

DFI will document and record all flight, maintenance and ground training. All documentation and record rentention will be stored in the Crew Briefing and Safety Office at the B-29 Doc Hangar, Education and Vistors Center (1788 S. Airport Road, Wichita, KS, 67209). Additionally, electronic copies of the records will be stored off-site. The documentation and records will contain the following information:

1. Date of each training session.
2. The amount of time of each session of the specific training given.
3. Location where each session of specific training was given.
4. The aircraft "N" number in which each flight training session was received.
5. The name and certificate number of the pilot/mechanic who provided each session of training.
6. The signature and printed name of the pilot or mechanic who received the training. That signature will serve as a verification of having received each session of training.

DFI will maintain the following information and records and will make those records available for review to the FAA when requested:

1. The name of each pilot/flight engineer (or FAA certificated personnel) DFI authorizes to conduct flight operations in its airplane under the terms of the LHFE Exemption.
2. Copies of each crewmember's FAA credentials/certificate, medical certificate, qualifications

and initial and recurrent training,and testing documentation to comply with the conditions listed above.

CHAPTER 5
Maintenance

Doc's Friends, Inc., will maintain its Experimental category aircraft in accordance with the FAA Approved Aircraft Inspection Program that meets the requirements of FAR 91.409 (e), (f) (4), and (g); 91.411 & .413; and the appropriate military technical manuals. See the DFI General Maintenance Manual for content. Records of maintenance performed and maintenance inspection records to comply with the conditions above shall meet the requirements of FAR 43.9, 43.11, 91.405 & 91.417.

Airworthiness Information
As part of the preflight duties, the assigned Pilot in Command (PIC) will:

1. Note the date and the aircraft Hobbs and compare them with the inspection due dates and times listed on the aircraft status sheet.
2. Work with the flight engineer and Chief of Maintenance to follow inspection timing and due dates/hours and whether the flight or series of flights can be completed under current inspection. The applicable inspections are listed below, along with when they must have been previously accomplished.
    a. Annual Condition Inspection within the preceding 12 calendar months.
    b. 50 Hour Inspection within the preceding 50 hours of operation when applicable.
    c. 100 Hour Inspection within the preceding 100 hours of operation when applicable.
    d. The time interval between inspections of the Approved Aircraft Inspection Program is not exceeded.
    e. Transponder, pitot/static system and altimeter inspections and calibrations have been complied with within the preceding 24 calendar months in accordance with 14 CFR 91.411 & 91.413.
    f. ELT Battery replaced on or before the date listed by the manufacturer or after one hour of cumulative use, whichever comes first.
    g. Aircraft weighing and current empty weight and center of gravity calculation.
3. If the scheduled flight(s) cannot be completed without one of the aforementioned inspections becoming overdue, the PIC will immediately contact the Director of Operations/Chief Pilot and Chief of Maintenance (or designee) for instructions. Under no conditions will a PIC commence a flight if any required inspection time has been exceeded or will be exceeded during the course of the flight.
4. Determine that for deferred and corrected mechanical irregularities the aircraft has been certified as approved for return to service by an airframe and Powerplant Mechanic or by the Chief of Maintenance. This certification will appear on the Aircraft Discrepancy Worksheet (ADW).

Reporting and Recording of Mechanical Irregularities
Whenever a crew member, mechanic or support member finds a defective piece of equipment, he/she will:

1. Check the Aircraft Discrepancy Worksheet (ADW) in the aircraft to see if the item has been previously reported and properly deferred or corrected. If the item has not been previously written up, record the pertinent information on the company ADW. The ADW will remain in

the aircraft until the affected part is repaired or replaced and an entry to that effect is made in the aircraft permanent maintenance records.

2. If the defective equipment is not deferrable, the PIC will not allow the aircraft to take off until the Chief of Maintenance (or his designee) is contacted and the mechanical irregularity is corrected.

All mechanical irregularities discovered during the course of a flight will be brought to the attention of the Chief of Maintenance after the flight, whether or not the Chief of Maintenance was notified previously.

Deferred Items
Temporary deferrals of some items are allowed by FAR 91.213(d). All deferred items will be recorded in the ADW. The log will contain the ADW page number, an exact copy of the write up, any flight limitations, who it was deferred by and the date it was deferred and who it was cleared by and the date cleared. To defer an item:

1. Notify Chief of Maintenance.
2. All deferred items will be placarded INOP.
3. Labels will be provided to note the discrepancy page # and item.
4. Affix INOP sticker adjacent to deferred item.
5. Complete entry in ADW.

Previously Deferred and Corrected Mechanical Irregularities
The Pilot in Command (PIC) will review the previous Aircraft Discrepancy Worksheet (ADW) in the aircraft to determine whether any write-ups have been either deferred in accordance with FAR 91.213(d) or corrected. If the PIC finds a mechanical irregularity that has not been either corrected or properly deferred, the PIC will not takeoff, but will contact the Chief Pilot or his designee for instructions.

**NOTE* See Appendix C for additional information and work flow procedures on Previously Deferred and Corrected Mechanical Irregularities.*

Obtaining Maintenance Away from the Home Base
If the aircraft requires preventative maintenance, maintenance or servicing while away from the home base, the PIC will contact the Chief of Maintenance or his designee for instructions.

Weight and Balance Control

Weight and Balance Procedures

1. Before each flight, the Flight Engineer (FE) will calculate the gross takeoff weight and the actual center of gravity for the loaded weight. The FE will determine that these calculated values fall within the manufacturer's allowable weight and balance limits for the aircraft. The FE will give the results to the PIC prior to flight.
2. Weight and balance calculations will be computed from the aircraft weight and balance records using standard weights for the crew, passengers, baggage and standard weights.
3. The weight may also be determined by asking each passenger their weight. In the event the FE determines an obvious discrepancy in the weight given, it will become necessary to weigh that passenger.

Flight Load Manifest
The Lead Scanner or ride desk coordinator will prepare a Flight Load Manifest (FLM) prior to each flight. The manifest will be signed by the PIC prior to the flight. DFI will keep a copy of the manifest on file for three years. The load manifest shall include at least the following items:

1. Date and scheduled time of departure.
2. The number of passengers.
3. The names of passengers and their seating locations.
4. Identification of crewmembers and their crew position assignments.

**NOTE* A copy of the FLM can be found in Chapter 10: Forms*

Fueling Procedures
All refueling will be made from aviation fuel sources using adequate filtering. There will be no "HOT" refueling, i.e., refueling an aircraft with any engines running. Cigarette smoking is PROHIBITED within 100 feet of the aircraft.

The Flight Engineer (FE) shall:

1. Coordinate with the PIC regarding the amount of fuel that will be required for the scheduled flight and place the order for it. The octane rating of the fuel dispensed will be the minimum octane required by the engine.
2. Ensure the aircraft is grounded properly.
3. Ensure refueling is not attempted in the vicinity of a thunderstorm.
4. Ensure that refueling does not take place inside a hangar.
5. Disembark all passengers and ensure they will not approach within 100 feet of the aircraft until refueling has been completed.
6. Verify that all aircraft electrical switches are placed in the OFF position prior to fueling and remain so for the duration of the fueling procedure, unless otherwise required for the refueling operation.
7. Verify that an adequate and operable fire extinguisher is available in the immediate vicinity.
8. Ensure that no person smokes, and that there is no lighted flame or spark within 50 feet of the aircraft.
9. After the refueling operation is completed and prior to flight:
    a. Verify the fuel and oil caps and associated access doors are secure.

CHAPTER 6
Passenger and Crew Safety Passenger Safety

Passenger Briefing: The PIC, Flight Engineer (FE) and Lead Scanner (or designee) for the flight shall conduct the safety briefing prior to passenger boarding, engine start up and taxi. The following items shall be briefed:

1. Boarding and deplaning techniques.
2. Smoking is prohibited.
3. Seat belts must be worn at all times unless otherwise instructed.
4. Location and means for opening entry doors and emergency exits.
5. Location of safety equipment.
6. Location and operation of fire extinguishers.
7. Inform passengers that the aircraft is in the Experimental category.

Dangerous Passengers
In the event a passenger becomes unruly or dangerous to the point of affecting the safety of a flight or other passengers, the PIC shall use his/her best judgement in addressing the situation and if necessary land the aircraft at the nearest suitable airport. Flight Operations and appropriate authorities shall be notified by the most expedient means. (Call ahead for Law Enforcement assistance).

Passenger Injuries
In the event of a passenger injury (non-aircraft incident/accident related), the PIC shall do everything reasonably possible to address the situation. If he/she deems it appropriate, the aircraft shall be diverted to the nearest suitable airport where medical assistance is available (call ahead). Continuation of the flight should be carefully evaluated by the PIC in the interest of passenger comfort and liability.

Passenger Illness
In the event of passenger illness, the PIC shall do everything possible to address the situation and assure the passenger is made as comfortable as possible. He/she shall exercise prudent judgment regarding continuation of the flight. Additionally, flight crews are reminded that if diversion to an alternate becomes necessary to address passenger injuries or illness, the PIC should select an alternate that can provide immediate medical attention to those passengers and upon arrival notify flight operations personnel, as per chain of command.

Sabotage and/or Bomb Threat

1. **On the Ground:** Remove all passengers from the aircraft and escort all passengers out of the area. Notify the appropriate authorities and maintain aircraft security until the arrival of those authorities. In no case will any crewmember re-enter or in any manner approach the aircraft or allow any unauthorized person or persons to approach the aircraft until it is released by the proper authorities.
2. **In Flight:** Advise ATC of the nature of the threat and request assistance. Land immediately at the nearest suitable airport and comply with paragraph (1) of this section. If an expeditious landing cannot be accomplished due to weather or other prevailing circumstances, technical advice can be obtained from FAA Ordinance Demolition specialist. These specialists are available via phone patch through the controlling ATC facility.

Bomb Threat Procedures

1. Proceed to the nearest suitable airport, land and evacuate the aircraft as soon as practical.
2. After considering aircraft capabilities and distance to the nearest suitable airport, when possible slow to approach speed, configure the aircraft for landing and restrict maneuvering to the minimum for safe operation.
    a. In the event of detonation, the systems required to place the aircraft in landing configuration could be damaged. If the aircraft is preconfigured, this problem is eliminated. Flight operations conducted at approach speeds in a level attitude reduces aircraft structural stress to a minimum.
3. If an immediate landing is not possible, contact FAA Security through ATC and follow their guidance.

Aerial Piracy
It is a violation of Federal law for any person to gain control over the operation of aircraft by the use of force, threat, or by any act of violence.

The following procedures have been established by Federal authorities and are provided herein as general crewmember guidance:

1. The Pilot in Command will utilize his/her best judgment in how to proceed. Drastic action should be taken if he/she believes the hijacker intends to use the aircraft as a weapon against a ground target. In any case, the best interest of the passengers and crew should be considered.
2. The Pilot in Command should attempt to utilize the aircraft transponder to convey his/her predicament to ATC.
3. Set transponder to Code 7500. When unable to change the transponder setting or when not under radar control, if possible, transmit a radio message which includes the phrase: "Trip, DOC 7-2 transponder 7-5-0-0."
4. Controllers shall acknowledge receipt of beacon Code 7500 by "(aircraft call sign)(name of facility), you are squawking 7500. Is this intentional?" An affirmative reply from the pilot or activation of the ident feature indicates confirmation and proper authorities will be notified.
5. When an in-the-clear radio transmission of a hijacking is received, controllers shall assign Code 7500 to the aircraft. This does not preclude a subsequent change to Code 7700 by the Pilot in Command, if necessary.
6. **Pilot Message:** Situation desperate, want armed intervention. After using code 7500, change the transponder to Code 7700. When unable to change the transponder setting or when not under radar control, if possible transmit "Trip, DOC 7-2, transponder seven seven zero zero." Pilots who change from Code 7500 to Code 7700 should remain on 7500 for at least three minutes or until a confirmation of Code 7500 has been received from the controller, before changing to Code 7700.
7. Aircraft squawking Code 7700 and not in radio contact with the ground will be considered by ATC to have an inflight emergency (in addition to hijacking). In these cases, notification of authorities shall include information that the aircraft displayed the hijack code as well as the emergency code.

Threat Notification Procedures
Immediately upon receipt of reliable information that the aircraft has been threatened, the individual who receives the information shall notify personnel pursuant to the chain of command who will provide all information required by:

1. Police/State/Local
2. FBI/DEA/ATF
3. FAA/DOT/NTSB Officials
4. U.S. Immigration/Customs Officials (if required)
5. Official Representative of Foreign Government, if involved.

Crewmember Incapacitation
In the event the Pilot in Command, Second in Command or Flight Engineer becomes incapacitated, the following procedure shall be utilized:

1. Assure a safe condition of flight exists (fly the aircraft).
2. Once aircraft control is established, assist the incapacitated crewmember.
3. Declare an emergency with ATC and advise them of the nature of the emergency and your intentions, request vectors and assistance.
4. Land at nearest suitable airport.

5. Once destination is determined, call ahead for medical assistance.
6. Upon arrival at the destination, notify Flight Operations Personnel immediately.

Chapter 7
Emergency Procedures

Emergency Evacuation
If it becomes necessary to evacuate the aircraft, alert the crew/passengers and proceed in accordance with the aircraft checklist (as found in Aircraft Handbook):

1. Set parking brake (PIC)
2. Notify Control Tower (SIC)
3. Mixture levers to Idle Cutoff (FE)
4. Magneto switches to OFF (FE)
5. Battery switches to OFF (FE)
6. Alarm Bell to ON (PIC)
7. Open Forward Emergency Exits and assist passengers (FE)
8. Scanners to open Emergency Exits in rear and assist passengers
9. Evacuate the immediate area for at least 300 feet in case of fire
10. PIC will do a head count and determine if anyone was left behind and if a rescue attempt will be made.

Emergency Evacuation Assistance
Persons who may need the assistance of another person to move expeditiously to an exit in an emergency will be additionally briefed by the Pilot in Command (PIC). If the handicapped person is accompanied by an attendant, the attendant will be briefed concurrently. This briefing will consist of:

1. Location of the nearest emergency exit.
2. Procedures to be followed so that the handicapped person is evacuated without delaying the evacuation of others on board the aircraft.

If a situation occurs that requires an emergency evacuation of the aircraft, the PIC will assign an Able Bodied Passenger (ABP) to assist.

CHAPTER 8
Standardization

Standardization of Flight Procedures
Crewmembers will at all times adhere to published standardized procedures in the conduct of flights. This will ensure that the aircraft will be operated according to procedures that the company deems to be safest. Standardization also facilitates crewmember expectations of other crewmembers, thereby maximizing crew coordination and efficiency, regardless of changes in crew makeup.

The substitution of techniques of personal preference is considered a serious breach of the procedures. All crewmembers are expected to conscientiously adhere to the DOC'S FRIENDS, INC., policies and procedures. If a crewmember must exercise a technique outside of the standard, the crewmember is highly recommended to share that technique with the Safety and Compliance Officer through the Voluntary Reporting tool.

Threat and Error Management
Experience has shown that a well-managed cockpit environment, including the timely and correct

exchange of information between cockpit crewmembers and the proper accomplishment of their appointed tasks, serves as one of the most effective methods by which aircraft operational safety can be enhanced.

1. Crewmembers are required to discuss any pertinent threat that could possibly effect this flight, this crew, this day.
2. Crewmembers are required to call out and trap any errors that might have occurred.
3. Crewmembers are required to manage any undesired aircraft state to protect the pilot, crewmembers and passengers.

Proper crew coordination procedures include, but are not limited to the following:

1. A preflight briefing that establishes details pertaining to the upcoming operation. Included in the preflight briefing will be AWARE: Aircraft status, Weather, Airport, Route, Emergencies/Extras.
2. Accomplishment of all checklists, using response prompts as indicated.
3. Altitude callouts, in VMC as well as in IFR conditions.
4. Descent rate and speed management, monitoring and callouts.
5. Pre-takeoff and pre-approach briefings.
6. Navigation and monitoring callouts if applicable.

Checklist Philosophy

The use of checklists to assist in the proper operation of the aircraft is mandatory for all flights. Only those checklists accepted by the Director of Operations/Chief Pilot for use by DOCS FRIENDS, INC., are acceptable, including the methodology and procedures developed for checklist use by flight crews.

Certain portions of the checklists are identified as requiring the use of the "challenge and response" method of accomplishment. Those portions not so identified may be accomplished silently by the pilot monitoring. Either way, the methodical completion of every appropriate portion of the checklist, without omission, is demanded of every crewmember.

1. The pilot completing the checklist is responsible for visually checking each item on the checklist, and ascertaining that the correct action has been taken.
2. Certain portions of the emergency checklist are required to be accomplished immediately, from memory, during an emergency. It is the responsibility of every flight crewmember to commit these portions to memory and review the accuracy and adequacy of their memory.
3. Crewmembers may develop flows for a checklist, however, the checklist MUST be used after each flow to ensure the checklist items were accomplished.
4. No crewmember is expected to attempt to accomplish, without omission, every detail of a flow from memory. Such an expectation would negate the rationale and practicality of using a written checklist. The proper method is to accomplish the flow to the extent possible from memory and then to utilize the checklist to ensure that any overlooked items are then accomplished.
5. The pilot flying will call for all appropriate checklists on the ground, giving consideration to other required crewmember duties and allowing time for their completion. The Pilot not flying will query the Pilot flying if there is an abnormal delay in the call for any checklist. During airborne operation, the pilot flying will call for the checklist in a similar manner.
6. Undue haste in the execution of any checklist is neither necessary nor desirable. **DO NOT RUSH!**
7. Upon completion of each individual checklist, the crewmember completing will announce, "(Checklist Name) CHECKLIST COMPLETE".

8. If a checklist cannot be completed when initiated because of an interruption or because an item on the checklist cannot yet be completed will be held until the interruption is over or the item can be completed. When the checklist item is accomplished, the challenge will be repeated, the proper action taken, proper response given and the checklist continued. **It is not acceptable to skip a checklist item and then depend on memory to accomplish the item later.** In the event that a normal sequence is interrupted when a long delay is encountered, such as during taxi-out, it may be necessary to return to an earlier point of the checklist and re-accomplish the checklist from that point.

CHAPTER 9
Mandatory Safety Reporting

Mandatory Notification Requirements
From the time any person boards the aircraft with the intention to fly until all such persons have disembarked, the occurrence of any of the following require Doc's Friends, Inc., to notify the FAA and NTSB in the most expeditious means available.

This includes reporting compliance with any item as defined in NTSB Part 830 as well as compliance with any items defined in the Exemption No. 107779A. *See Appendix C for additional information*.

CHAPTER 10
Emergency Contact List

Organizational Contacts

- *Executive Director/General Manager*
  Josh Wells, 316-209-0470, josh@b29doc.com
- *Director of Operations/Chief Pilot*
  Mark Novak, 402-770-8029, t6_av8r@yahoo.com
- *Chief of Maintenance*
  Ken Newell, 316-250-7810, ken@b29doc.com
- *Safety and Compliance Officer*
  Bruce Granheim, 316-393-9643, bruce@b29doc.com

Outside Agencies

- Police/Fire: 911
- Wichita FSDO: 316-941-1200
- NTSB: ntsb.gov, 844-373-9922 to report accident/incident
- Homeland Security: 202-282-8000

CHAPTER 11: Forms

Aircraft Discrepancy Worksheet

AIRCRAFT REGISTRATION N69972	DOC'S FRIENDS DISCREPANCY WORKSHEET	PG ____ OF _____
SQK#	DISCREPANCY	NAME
		DATE
CORRECTIVE ACTION:		MECH
		DATE
		INSPECT
		DATE
P/N & S/N OFF	P/N&S/N ON	
SQK#	DISCREPANCY	NAME
		DATE
CORRECTIVE ACTION:		MECH
		DATE
		INSPECT
		DATE
P/N & S/N OFF	P/N &S/N ON	
SQK#	DISCREPANCY	NAME
		DATE
CORRECTIVE ACTION:		MECH
		DATE
		INSPECT
		DATE
P/N & S/N OFF	P/N &S/N ON	

FORM ADW, REV 2 01/2021

Approved Airworthiness Inspection Program Status Sheet

This is a screenshot of the first page of a multi-page report showing the maintenance status of all Inspections, life limited items and AD/SB Compliances. There will be a current copy carried on the aircraft at all times when flying, and a copy on file in the B-29 Doc Hangar, Education and Visitors Center for review by the FAA or designee.

Boeing B-29 "DOC" Approved Airworthiness Inspection Program (AAIP) Status Sheet

The "Next Due" Hrs & Dates below refer to the next time or date an insp. must be completed. All inspections are tracked by Hobbs time, unless otherwise stated.			
#1 Engine Make, Model & S/N	Curtiss-Wright	R-3350-26WD-B29	W531365
#2 Engine Make, Model & S/N	Curtiss-Wright	R-3350-26WD-B29	C590591
#3 Engine Make, Model & S/N	Curtiss-Wright	R-3350-26WD-B29	190709
#4 Engine Make, Model & S/N	Curtiss-Wright	R-3350-26WD-B29	W531613
#1 Propeller Make, Model & S/N	Hamilton Standard	24F60-73	FB1084-B
#2 Propeller Make, Model & S/N	Hamilton Standard	24F60-73	FB5322-B
#3 Propeller Make, Model & S/N	Hamilton Standard	24F60-73	FA6773-B
#4 Propeller Make, Model & S/N	Hamilton Standard	24F60-73	FA4099-B

Hobbs Meter: 274.4 Airworthiness Date: 07-26-2017 Aircraft Registration Date: 11-05-2012 Formulas for computing total times & times since overhaul: Rev: 03-12-2021					
Aircraft Total Time =	Hobbs + 1467.9			See Flight Log	364
#1 Engine Total Time =	Unknown	274.4	#1 Engine Time Since Overhaul =	= Hobbs	274.4
#2 Engine Total Time =	Unknown	94.9	#2 Engine Time Since Overhaul =	= Hobbs	94.9
#3 Engine Total Time =	Unknown	274.4	#3 Engine Time Since Overhaul =	= Hobbs	274.4
#4 Engine Total Time =	Unknown	274.4	#4 Engine Time Since Overhaul =	= Hobbs	274.4
#1 Propeller Total Time =	= ATT	1742.3	#1 Propeller Time Since Overhaul =	= Hobbs	274.4
#2 Propeller Total Time =	= ATT	1742.3	#2 Propeller Time Since Overhaul =	= Hobbs	274.4
#3 Propeller Total Time =	= ATT	1742.3	#3 Propeller Time Since Overhaul =	= Hobbs	274.4
#4 Propeller Total Time =	= ATT	1742.3	#4 Propeller Time Since Overhaul =	= Hobbs	274.4

INFORMATION ONLY

Aircraft Flight Log

DOC's Friends, Inc.
Aircraft Flight Log
N69972
B-29 44-69972

Date	Flight From - To	Flight Duration Hrs. Ths.	Accumulated Total Time Aircraft Hrs. Ths.	Eng. 1 Hrs. Ths.	Eng. 2 Hrs. Ths.	Eng.3 Hrs. Ths.	Eng. 4 Hrs. Ths.	No of Lds	Crew Pilot / Copilot / Flt. Engineer
Accumulated Totals Brought Fwd. →									

Flight Log Number	Page _____ of _____	Comments:

Rev 2 02/22/2021

Flight Log Manifest Form

DOC'S FRIENDS INC

PASSENGER MANIFEST and RELEASE AGREEMENT

This form must be completed **in full** prior to **any** flight with two or more persons on board. The pilot in command will insure one copy will be left with a responsible DFI member or responsible person (FBO or Host) at the point of departure. It is the responsibility of the pilot in command to see that these details are properly completed.

Aircraft: B-29 DOC **N#**: N69972 **Departure Point:** _____ **Arrival**: _____

Pilot in Command: _____ Copilot: _____ Flight Engineer: _____

Date: _____

KNOWN ALL PERSONS BY THESE PRESENT: WHEREAS, THE UNDERSIGNED desire to participate in Doc's Friends Inc. show activities and/or fly or take a flight as pilot, copilot or crew member or passenger in DFI aircraft; and whereas I will be doing so entirely on my own initiative, risk and responsibility; now, therefore, in consideration of the permission extended to me by DFI, through its officers and agents to participate in DFI air show activities and/or fly or take said flight in DFI aircraft as Pilot, Copilot Crewmember or Passenger. I do hereby, for myself, my heirs, executors, and administrators remise, release and forever discharge and hold harmless DFI, it's administrators, and all its officers, agents, servants and employees, acting officially or otherwise, from any and all claims, demands, action or causes of actions including fault or negligence on the part of DFI it's administrators, and all its officers, agents, servants and employees, during such participation flying, or flight or continuation thereof, as well as ground and flight operations incident thereto. I am fully cognizant that no/or only limited passenger liability insurance exists on behalf of DFI for this flight. **I SPECIFICALLY AGREE TO INDEMNIFY, DEFEND & HOLD HARMLESS DFI FROM ANY LIABILITY WHATSOEVER ARISING OUT OF DFI'S SOLE AND/OR COMPARATIVE NEGLIGENCE.** Aircraft riders please note; DFI makes no stipulations or guarantee regarding any Personal life or injury insurance you may have in place. Some policies do not cover you if you fly in a non-standard category aircraft. DFI's aircraft is an EXPERMENTIAL category aircraft, so if you are concerned please check your insurance company regarding your coverage and exclusions before taking a ride in DFI's aircraft.

Name (Print or Type)	Crew & Passengers	By way of signature, signee has read, agrees with and fully understands this document.
	Pilot	
	Copilot	
	Flight Engineer	
	Left Scanner	
	Right Scanner	
	Aft Scanner	
	Bombardier	
	Cockpit Observer	
	Navigator	
	Radio Operator	
	Gunner (aft)	
	Gunner (aft)	
	Gunner (aft)	
	Gunner (aft)	
	Gunner (aft)	
	Gunner (aft)	

DFI-PRO 9972-8 Manifest Form 2020

Passenger Briefing Information

Before permitting a person to be carried on board this DFI aircraft for the purposes authorized by the FAA, the PIC will inform that person that the aircraft holds an **experimental airworthiness** certificate. The significance of the airworthiness certificate as compared to a standard airworthiness; and the fact that the FAA has authorized this flight under a grant of exemption from the requirements of FAR 91.315, 91.319(a), 199.5(g) and 119.21(a) shall be explained to the person on board. The explanation of the significance of the experimental airworthiness certificate compared to the standard airworthiness certificate must include at least the following information:

The FAA has not established nor has it approved experimental category airworthiness certificated aircraft manufacturing standards. In contrast, standard category airworthiness certificated aircraft are manufactured to FAA approved standards, including standards addressing the design of the aircraft and life limited parts.

An aircraft may be issued an **experimental airworthiness** certificated for the purposed of exhibition when the aircraft is intended only for exhibition of the aircraft's flight capabilities, performance, or unusual characteristics or air shows, motion picture, television, and similar productions and the maintenance of exhibition flight proficiency, including (for persons exhibiting the aircraft) flying to and from such air shows and productions.

Standard category airworthiness certificates are issued for the aircraft when the FAA fines the aircraft has been built and maintained in accordance with the aircraft's type certification standards as established by the FAA and the aircraft inspection and maintenance requirements are in compliance with the applicable FARs.

Briefed by: _____ Date: _____

APPENDIX A

General Training and Qualifications Manual
Ground Training – Before being assigned to any duty, all personnel will receive basic indoctrination training in DFI corporate policies and procedures, aircraft construction, maintenance and operation. Additionally, all pilots will receive annual ground training on a B-29. A record of this training will become a part of each pilot's training file. FORM PG/FT-001R2 will be used for training recording. Form can be viewed on page ##

Required Basic Indoctrination - Pilot

1. DFI policies and organization
2. FAA rules and regulations
3. DFI Operations Manual
4. DFI B-29 Aircraft Handbook
5. DFI General Maintenance Manual
6. DFI SMS Manual
7. Maintenance reporting procedures

Required Pilot Ground Training Tasks

1. General information and description of the B-29
2. Aircraft Limitations
3. Aircraft servicing
4. Airspeeds
5. Fuel system
6. Electrical system
7. Engines
8. Instruments and Avionics
9. Landing Gear, Brakes, Controls and flaps
10. Propellers
11. Emergency Procedures
    a. Instruction in Emergency Procedures including coordination of passengers and crew
    b. Individual instruction in the location, function and operation of emergency equipment, including:
        i. First Aid equipment and its proper use
        ii. Portable fire extinguishers.
    c. Instruction in the handling of emergency situations including:
        i. Fire in flight or on the ground and smoke control procedures with emphasis on electrical equipment and related circuit breakers found in cabin areas.
        ii. Illness, injury or other abnormal situations involving passengers or crewmembers
12. Weight and Balance
13. Performance and Planning
14. Checklist usage

Required Pilot Flight Training Tasks
The following annual training/testing tasks will be completed and/or reviewed by the applicant utilizing Visual Flight References and satisfying the standards for each task as listed in the current Commercial ACS (FAA-S-ACS-7a Change 1):

1. Preflight Preparation
    a. Airplane Exam (oral or written)
    b. Airplane Performance & Limitations (oral or written)
2. Ground Operations including:
    a. Preflight Inspection
    b. Cockpit Resource Management
    c. Powerplant Start Procedures
    d. Taxiing
    e. Pre-takeoff Checks
3. Takeoffs and Departures including:
    a. Normal and Crosswind Takeoffs
    b. Powerplant failures
    c. Rejected takeoffs
4. In-flight Maneuvers including:
    a. Steep Turns
    b. Approach to Stalls
    c. Powerplant failure
    d. Specific flight characteristics
5. Landings and approaches to landings including:
    a. Normal and Crosswind approaches and landings
    b. Maneuvering to landing with a simulated powerplant failure
    c. Rejected landing
    d. Landing from a nonstandard flap approach
6. Normal and Abnormal Procedures including:
    a. Powerplant
    b. Fuel system
    c. Electrical system
    d. Hydraulic system (brakes)
    e. Fire Detection
    f. Navigation and Avionics system
    g. Flight Control system
    h. Airplane and personal Emergency Equipment
7. Emergency Procedures including:
    a. In-flight fire and smoke removal
    b. Emergency Evacuation
8. Post Flight Procedures including:
    a. After Landing procedures
    b. Parking and Securing airplane

FORM PG/FT-001R2 (revision: 03/2021)

FLIGHT TRAINING FORM (PILOTS)

DOC's Friends, Inc.

Aircraft: B-29	N69972	Training Date:

Pilot's Name (Printed):	Certificate #
Instructors Name:	Certificate #
Location:	Time Spent:

Pilot's Signature: _____

This signature is verification the training was received.

Pilot Flight Times	
Pilot Total Time:	*Total Time Multiengine:*
Total Time in Type:	*Total Takeoffs & Ldgs. in Type:*

(X=Not Done, S=Satisfactory, U=Unsatisfactory)

Subject / Maneuver	X	S	U
a. Preflight Preparation			
Aircraft Exam (written)			
Aircraft performance / limitations (Oral evaluation)			
Doc Ops Manual (Oral)			
LHFE Limitations (Oral)			
DOC SMS Manual (Oral)			
DOC General MX Manual (Oral)			
Checklist Review			
CRM / Human Factors			
Trip Planning			
b. Ground Operations			
Preflight Inspection, performance, briefings (Crew & Pax)			
Powerplant Start Procedures			
Taxiing			
Pre-takeoff Checks			
c. Takeoffs & Departures			
Normal & Crosswind			
Powerplant Failure			
Rejected			
d. Inflight Maneuvers			
Steep Turns			
Stalls – Clean, Appr, Ldg.			
Powerplant Failure (*)			
Specific Flight Characteristics			
e. Approaches & Landings			
Normal & Crosswind			
Maneuvering with simulated engine fail			
Reject Landing			
No flap or nonstandard flap approach			

Subject / Maneuver	X	S	U
f. Normal & Abnormal			
Powerplant			
Fuel System			
Electrical System			
Hydraulic System			
Fire Detection			
Nav & Avionics System			
Flight Control System			
Aircraft & Personal Emergency Equipment			
g. Emergency Procedures			
Inflight Fire & Smoke Removal			
Emergency Descent			
Emergency Evacuation			
h. Post Flight Procedures			
After Landing Procedures			
Parking and Securing			

Comments / Remarks

(*) NOTE: Actual engine shutdown, propeller feather and restart exercise for those pilots already holding the appropriate Experimental Authorization is not required.

Form PG/FT-001R2 Dated 03-04-2021

GROUND TRAINING FORM (PILOTS)

DOC's Friends, Inc.

Aircraft: B-29	N69972	Training Date:

Pilot's Name (Printed):	Certificate #
Instructors Name:	Certificate #
Location:	Time Spent:

Signature: _____

This signature is verification the training was received.

(X=Not Done, S=Satisfactory)

Subject / Maneuver	X	S
a. General Items		
DFI Policies & Organization		
FAA Rules & Regulations		
DOC Ops Manual		
DFI B29 Aircraft Handbook		
DFI General MX Manual		
DOC SMS Manual		
MX Reporting Procedures		
b. Aircraft General & Systems		
Description/Info Doc B-29		
Aircraft Limitations		
Aircraft Servicing		
Airspeeds		
Fuel System		
Electrical System		
Powerplants		
Instrument/Avionics		
Landing Gear/Brakes/Controls		
Emergency Procedures		
Weight & Balance		
Performance & Planning		
Checklist Usage		

Comments / Remarks

Form PG/FT-001R2 Dated 03-04-2021

Required Flight Engineer Ground Training Tasks

1. General information and description of the airplane
2. Airplane Limitations
3. Airplane Servicing
4. Electrical system
5. Powerplants, principles and operation
6. Instruments
7. Landing Gear, Brakes, Controls and Flaps
8. Propellers
9. Emergency Procedures
    a. Instruction in Emergency Procedures including coordination of passengers and crew
    b. Individual instruction in the location, function and operation of emergency equipment, including:
        i. First Aid equipment and its proper use
        ii. Portable fire extinguishers.
    c. Instruction in the handling of emergency situations including:
        i. Fire in flight or on the ground and smoke control procedures with emphasis on electrical equipment and related circuit breakers found in cabin areas.
        ii. Illness, injury or other abnormal situations involving passengers or crewmembers
10. Weight and Balance
11. Performance and Planning
12. Checklist usage

Required Flight Engineer Flight Training Tasks

1. Preflight Preparation
    a. Airplane Exam (oral or written)
    b. Airplane performance & Limitations (oral or written)
2. Ground Operations including:
    a. Preflight Inspection
    b. Cockpit Resource Management
    c. Powerplant Start Procedures
    d. Taxiing
    e. Pre-takeoff Checks
3. Takeoffs and Departures including:
    a. Normal operating conditions
    b. Powerplant failures
    c. In-flight Operations
    d. Powerplant Malfunction or failure
    e. Fire Detection and Extinguishing system
    f. Fuel system management
    g. Electrical system management
    h. Hydraulic system management (brakes)
    i. Flight Control system
    j. Airplane and personal emergency equipment

4. Emergency Procedures including:
    a. In-Flight fire and smoke removal
    b. Landing Gear Malfunction
    c. Flap System Malfunction
    d. Emergency Evacuation
5. Post Flight Procedures including:
    a. After Landing Procedures
    b. Parking and securing aircraft

See next page for FORM MXT-001R2_FE

GROUND & FLIGHT TRAINING FORM (FE)

DOC's Friends, Inc.

Aircraft: B-29	N69972	Training Date:

Mechanics Name (Printed):	Certificate #
Instructors Name:	Certificate #
Location:	Time Spent:
Signature: _____ *This signature is verification the training was received.*	

(X=Not Done, S=Satisfactory)

Subject / Maneuver	X	S
a. General Items		
Aircraft Exam (written)		
DOC Ops Manual (Oral)		
LHFE Limitations (Oral)		
DOC SMS Manual (Oral)		
DOC Maintenance Manual		
Tech Manuals		
b. Aircraft Systems		
Powerplant		
Fuel System		
Electrical		
Hydraulic		
Fire Extinguishing		
Flight Control		
Landing Gear		
Avionics		
Propeller		
Aircraft & Personal Emergency Equipment		
c. Aircraft Servicing		
Powerplant		
Fuel System		
Hydraulic		
Landing Gear		
Propeller		

Comments / Remarks

Form MXT-001R2 Dated 01-11-2021

Maintenance and Ground Training - General
All maintenance personnel will be properly trained in the policies and procedures required to perform their duties. The General Maintenance Manual (GMM) contains the Maintenance Training Program. The Chief of Maintenance (COM) will develop training programs, manuals or other applicable training material based on input from the manufacturers, military training manuals or other Industry Peer developed training materials. It is the responsibility of the COM to ensure all maintenance personnel are adequately trained to perform their assigned duties. In-house training is accomplished to ensure that personnel are familiar with the procedures outlined in this manual with respect to their assigned and authorized duties.

All maintenance personnel receive recurrent training on the GMM procedures every 12 months. Such training includes review, reinforcement and upgrade of all training in both Corporation procedures and aircraft technical subjects, systems and safety related items.

Maintenance and Ground training
All maintenance personnel are trained in the contents and use of the GMM and the SMS. This training is entered either on the computer or printed records that are acceptable to the COM.

Completion of the Mechanic and Ground Training Record
Only a qualified mechanic or inspector will make entries in a training record. It is the responsibility of the COM to ensure all entries are complete and accurate. The COM maintains the mechanic training records. Similar in scope to basic corporation specific procedures for Return to Service, Deferral, and Logbooks.

See next page for Form MXT-001R2

GROUND TRAINING FORM (MAINTENANCE)

DOC's Friends, Inc.

Aircraft: B-29	N69972	Training Date:

Mechanics Name (Printed):	Certificate #
Instructors Name:	Certificate #
Location:	Time Spent:
Signature: _____ *This signature is verification the training was received.*	

(X=Not Done, S=Satisfactory)

Subject / Maneuver	X	S
a. General Items		
Aircraft Exam (written)		
DOC Ops Manual (Oral)		
LHFE Limitations (Oral)		
DOC SMS Manual (Oral)		
DOC Maintenance Manual		
Tech Manuals		
b. Aircraft Systems		
Powerplant		
Fuel System		
Electrical		
Hydraulic		
Fire Extinguishing		
Flight Control		
Landing Gear		
Avionics		
Propeller		
Aircraft & Personal Emergency Equipment		
c. Aircraft Servicing		
Powerplant		
Fuel System		
Hydraulic		
Landing Gear		
Propeller		

Comments / Remarks

Form MXT-001R2 Dated 01-11-2021

Safety Manual System Training
The Safety and Compliance Officer (SCO) will develop and conduct training on the DFI SMS Manual and other related aspects of operational safety.

APPENDIX B

Training Tests and Forms

2021 B-29 Flight Crew Test

Name:_____ Cert #_____Date_____

1. Aircraft Specs

   Wingspan _____

   Length _____

   Height _____

   Gear Width _____

   Prop Clearance Inboard _____

   Prop Clearance Outboard _____

   Centerline to Inboard Prop _____

   Centerline to outboard prop _____

   Max Takeoff Weight _____

   Forward CG Limit up to 88,000 LBS _____

   Forward CG Limit above 88,0000 LBS _____

   AFT CG Limit _____

   Max Landing Weight _____

   Max Airshow Weight _____

2. Airspeeds – Stall Speeds ref at 90,000 LBS

V_{NE} _____	V_{S35} _____	
Bomb Bay: _____	V_{S45} _____	
V_{F25} _____	$V_{REF} = V_S +$ _____	
V_{FE} _____	$V_{MC}^{5°}$ _____	
V_{10} _____	$V_{MC}^{0°}$ _____	
V_S _____	V_{MC}^{2} _____	Recommended Speed _____
V_{S25} _____	V_{MC}^{G} _____	

3. Power Settings

Condition	Manifold Pressure	RPM
Takeoff		
Climb 1		
Climb 2		
Cruise Cross Country		
Cruise Ride Flight		
Auto Rich must be used anytime above 32" MP 2100 RPM 232° C		

1

4. Fuel System

Total Fuel Capacity	
Useable Outboard Tanks	
Useable Inboard Tanks	
Minimum Fuel for Takeoff	
Minimum Fuel at Landing	

5. Engine oil tank and Feathering oil tank capacities are__and_____Gallons.
   30/30 35/35 90/6 85/7.5

6. Normal fuel consumption rate is_____gallons / hour.
   400 500 200 300

7. Hydraulic reservoir capacity is_____gallons.
   5 10 55 3

8. Normal system hydraulic pressure is_____to_____PSI.
   2500/3000 1025/1225 1200/1500 500/1000

9. With an electric hydraulic pump failure, pressure can be supplied by the_____pump.
   auxiliary foot hand engine driven

10. With normal hydraulic system failure, braking is available by using_____.
    parking brakes prop reverse
    tail hook emergency brake levers

11. Electrical system has_____engine generators and____APU generator.
    6/2 6/1 4/1 7/1

12. Electrical power for flight instruments and gyros comes from_____.
    the APU inboard generators auxiliary batteries an inverter

13. During in-flight engine shutdown, if the prop feather motor will not stop, even after pulling out the feather button, the only way left to stop it is by_____.

    pulling the feather motor circuit breaker turning off the FE battery switch
    turning off all generators turning off all electrical power

14. If all electrical power is lost, the landing gear can be lowered by_____.
    emergency accumulator free falling
    hand pump manual cranking

15. When using the "emergency flap" switch, release it_____.
    before reaching "up" or "down" limit when flaps stop moving
    when engineer reports "load" when scanner reports "flaps stopped"

2

16. The "takeoff warning horn" will sound at other than flaps 15 setting when advancing the throttles.
    True False

17. When icing conditions are anticipated/encountered the PIC should_____.
    increase of turbo settings to raise temperatures
    the "icing penetration checklist"
    wing anti-ice on
    DO NOT FLY IN ICING CONDITIONS! B-29 HAS NO ICE PROTECTION!

18. Which statement best describes the prop feathering? _____
    Prop feathering oil comes from the engine oil tank.
    Prop feathering oil comes from the engine oil system.
    Prop feathers automatically with loss of engine oil pressure.
    Prop feathering oil comes from a separate 6 gallon tank and is limited to 1½ cycles only.

19. Emergency brake accumulators are normally recharged by_____.
    the copilot using the hand pump
    the normal system when the engineer positions the Emergency Filler Valve on his panel
    the automatic recharging system
    increasing the RPM on inboard engines and announcing "accumulator recharge checklist"

20. Bomb bay doors_____.
    when activated, operate instantly and are a hazard to personnel on the ground
    operate all the time
    have to be manually pumped open
    are permanently inoperative

21. Parking brakes can be released at the copilot position, if required.
    True False

22. Engine fire extinguishing system_____.
    has 2 bottles – 1 for each side
    has 1 bottle for each engine
    is inoperative
    has 2 bottles per side available to either engine on that side

23. Engines can be operated normally with the flight controls locked.
    True False

24. The main landing gear can be extended by_____if the normal extension fails. (Select all that apply)
    opening "star" valve and using the hand pump
    moving and using the portable electric flap motor in the bomb bay
    using a hand crank
    releasing the uplocks

25. Passengers can be carried on MX check flights required after an engine change.
    True False

26. Reduced power takeoffs are permitted.
    True False

27. _____are required to have signed a "Hold harmless" and manifest. (select all that apply)
All crew All passengers All ground crew

28. Approximately how many brake applications are available when using the emergency brake levers? _____

29. What are the Five things that can happen when you feather the prop?

1.

2.

3.

4.

5.

30. Where are the operating limitations, flight log, weight & Balance located?

_____

31. Rides on the B29 can be sold only in accordance with _____.

32. All LHFE flights must be conducted between the hours of official sunrise and sunset?
True False

4

33. All LHFE flights must be conducted at an altitude greater than _____feet.

34. All LHFE flights must be within _____ sm radius of the departing airport.

35. All LHFE flights must have visibility greater than ____ sm, and a minimum ceiling of _____ Feet AGL for flights within 25sm of the departing airport.

36. While conducting a LHFE ride is formation flying allowed?
    True False

37. While on a LHFE flight may anyone besides an approved PIC or SIC occupy or manipulate the flight controls? _____

38. What is SMS? _____

39. Where can you find a copy of the SMS? _____

40. When is an SMS report Required?
    1. _____
    2. _____
    3. _____
    4. _____
    5. _____
    6. _____
    7. _____
    8. _____

5

41. Generally in the event of any Emergency involving Doc's Friends or the public, aircraft or property?

    1. _____
    2. _____
    3. _____
    4. _____
    5. _____
    6. _____

42. What is an ERP? _____

43. In the event of an emergency we shall in act the ERP by doing the following:
    1. Is there potential harm to persons or property
        - Call _____
    2. Take Action to Prevent Further Injury or Damage
        - Move people to a _____.
        - Move vehicles and equipment to a _____.
        - Notify appropriate _____ or control entities.
        - Take action to _____ a dangerous situation.
    3. Assess injury or damage for a situational report.
        - Make _____ notes of the timeline and major factors.
        - Preserve the _____ and evidence of equipment failure.
        - Take photos and ask others to _____.
    4. Contact the appropriate DFI personnel.
        - Executive Director _____

          Phone: _____

          Email: _____
        - Flight Operations / Chief Pilot _____

          Phone: _____

          Email: _____
        - Director of Maintenance _____

          Phone: _____

          Email: _____
        - Director of Safety and Compliance _____

          Phone: _____

6

Email: _____

Outside Agencies

- Police/Fire: 911
- Wichita FSDO: _____
- NTSB: ntsb.gov _____ to report accident/incident
- Homeland Security: _____

44. Where are the safety reporting forms and box at to report any safety concerns?

_____

45. Which way do you face going up and down the ladders/steps?

7

DOC B-29
2021 Systems and Operational Information MX

Hydraulics:

1. What does the hydraulic system operate?
2. What type of hydraulic fluid does the system use?
3. What is the normal service capacity of the hydraulic reservoir?
4. Which engine or engines are the hydraulic pumps located?
5. Is there an emergency backup for the electric hydraulic pump?
6. How is the emergency hydraulic system serviced?
7. How are the emergency brakes operated?
8. Approximately how many brake applications are available when using the emergency brake levers?
9. Do the brakes receive the full hydraulic pressure during use?
10. What type of brakes are on the B-29?
11. What type of circuit protection does the electric hydraulic pump have?
12. If the hydraulic pump relay sticks closed, how can you remove power from the pump?
13. Where are the normal and emergency brake accumulator's nitrogen service ports?
14. What is the nitrogen service pressure for the normal and emergency brake accumulators?

Flight instruments/Communications:

15. What powers the electrical flight instruments?
16. Where is the circuit protection for the avionics?
17. Where are the controls for the Intercom system located?

Landing gear:

18. Under normal conditions, what powers the extension/retraction of the landing gear?

19. Under emergency conditions, how can the landing gear be lowered?

20. What are the tires serviced with and what are the pressures?

21. What is the nose gear shimmy dampener serviced with & to what level?

22. How is the parking brake engaged and disengaged?

23. Should the park brake be left on at all times when parked?

Propellers:

24. What type of propellers does the B-29 use?

25. What is meant by the term "Full Feathering"?

26. Where does the oil come from when feathering the propellers?

Electrical system:

27. What type of electrical power does the B-29 use?

28. Describe the electrical generators on the B-29.

29. When an external DC power cart is used, does the engineer have control of the power from his switch panel?

30. What supplies AC power for the avionics?

31. How many batteries are on the aircraft?

32. If the main batteries are off, can the avionics still be powered?

Powerplants:

33. What engine does the B-29 use?

34. What type of ignition system is on these engines?

35. Is this engine fuel injected?

36. Is this engine supercharged?

37. If a throttle cable breaks or becomes disconnected what happens to the power and how can the engine be controlled?

38. How large is the oil tank?

39. What is the minimum oil quantity for operation?

40. What type or grade of oil is used?

41. How many blades does the engine need to turn to be assured it is not hydraulicly locked?

42. True or false, it is OK to turn the engine backwards to clear a hydraulic lock?

43. What is the best way to clear a hydraulic locked engine?

45. Why is it best to clear the engine with the starter?

Flight controls:

46. What ways can the wing flaps be deployed?

47. What caution is there about using the emergency flap control switch?

48. With the control lock on, can the throttles be used?

49. How are the primary flight controls actuated?

Fuel System:

50. What is the approximate total usable fuel of the B-29?

51. What is the approximate capacity of the outboard fuel tanks?

52. What is the approximate capacity of the inboard fuel tanks?

53. How many and where are the fuel filler ports located?

54. What color should the fuel be when sumping the fuel tanks?

55. Is there a cross-feed procedure?

Miscellaneous Emergency Procedures:

56. How many engine fire bottles are there on the B-29 and where are they located?

57. How many handheld fire extinguishers are in the forward flight deck area?

58. How many handheld fire extinguishers are in the aft compartments?

59. Are there smoke hoods in the aircraft?

60. Where is the Maintenance and Parts tech order books located?

_____
Print Name

_____
Signature

_____
Date

Scanner Ground and Flight Training Form
FORM SCAN-001

GROUND AND FLIGHT TRAINING FORM (Scanners)
DOC's Friends, Inc.

Aircraft: B-29	N69972	Training Date:

Scanners Name (Printed):	
Instructors Name:	
Location:	Time Spent:
Signature: _____ *This signature is verification the training was received.*	

(X=Not Done, S=Satisfactory)

Subject	X	S
A. General Items		
Scanner Exam (written)		
DOC Ops Manual (Oral)		
LHFE Limitations (Oral)		
DOC SMS Manual (Oral)		
Checklist Procedures		
B. Aircraft Operations		
Preflight Duties		
Passenger Briefing		
Departure		
Flight		
Emergency Procedures		
Fire and Smoke Charts		
Servicing Equipment		
Long Line Operations		
Aircraft & Personal Emergency Equipment		
C. Post Flight		
After Landing Procedures		
Parking & Securing		

Comments / Remarks

Form SCAN-001 Dated 01-11-2021

B-29 Scanner Test

1. Name
2. Qualified Scanner Position
3. Date
4. Wingspan
5. Length
6. Height
7. Gear Width
8. Prop Clearance Inboard
9. Prop Clearance Outboard
10. Centerline to inboard prop
11. Max Takeoff Weight
12. Max Landing Weight
13. Total fuel capacity
14. Minimum fuel for takeoff
15. Minimum fuel for landing
16. Where is the emergency electric motor that runs the main gear and flaps located?
17. If all electrical power is lost, the landing gear can be lowered by
    a. Emergency accumulator
    b. Manual cranking
    c. Hand pump
    d. Backup electrical motor
18. Bomb bay doors
    a. When activated, operate instantly and are a hazard to personnel on the ground
    b. Operate all the time
    c. Have to be manually pumped open
    d. Are permanently inoperative

19. Parking brakes can be released at the copilot position if required
    a. True
    b. False

20. Engine Fire extinguishing system
    a. Has 2 bottles – 1 for each side
    b. Is inoperative
    c. Has 1 bottle foe each engine
    d. Has 2 bottle per side available to either engine on that side

21. The main landing gear can be extended by _____ if the normal extension fails. Select all that apply)
    a. Opening the "star valve" and using the hand pump
    b. Moving and using the portable electric flap motor in the bomb bay
    c. Using hand crank
    d. Releasing the uplocks

22. If the emergency main gear motor does not work, is there a back up?

23. Where is the handheld fire extinguisher and fire axe located in the aft cabin?

24. There are six different exits from the aft cabin that could be used in an emergency to get out of the aircraft. Name them.

25. In an emergency, who is the last person to exit the aft cabin?

26. After landing at our last location for the day, the Left Scanner normally deplanes to install the chocks. What does the scanner do after installing chocks?

27. As a crew member, we have a saying we use. "If you see something, _____".

28. Where are the down locks stored when not installed?

29. When do we install down locks?

30. Where is the emergency first aid kit for the aft cabin located?

31. In the event that the nose gear does not come down when selected, is there a backup system?

32. If the nose gear emergency system has to be employed, who does it?

33. If the main gear or flap emergency extension system has to be employed, who does it?

34. Another duty Scanners perform on the road is Long Line duty at engine start up. After start up, how does the Scanner get onboard the aircraft?

35. Passengers can be carried on the MX check flights required after an engine change
    a. True
    b. False

36. Who is required to have signed a "hold Harmless" and manifest. Select all that apply
    a. All passengers
    b. All Crew
    c. All Ground Crew

37. Where are the operating limitation, flight log, weight and balance located?

38. Rides on the B-29 can be sold only in accordance with?

39.

40. All LHFE flights must be conducted between the hours of official sunrise and sunset?

a. True
b. False

41. All LHFE flights must be within _____SM radius of the departing airport.
42. All LHFE flights must have visibility greater than ____SM, and a minimum celling of ____ Feet AGL for flights within 25 SM of the departing airport
43. While conducting a LHFE ride is formation flying allowed?
    a. Yes
    b. No
    c. Maybe

44. While on a LHFE ride may anyone besides an approved PIC or SIC occupy or manipulate the flight controls?
    a. Yes
    b. No

45. What is SMS?

46. Where can you find a copy of the SMS?

47. When is an SMS report Required Select all that apply
    a. An aircraft accident, as defined in NTSB Part 830.
    b. A flight control system malfunction or failure.
    c. The inability of any required flight crewmember to perform his normal flight duties as a result of injury or illness.
    d. Inflight fire.
    e. Aircraft collide in flight.
    f. Damage to property (other than an aircraft) if the cost of repair is estimated to exceed $25,000. If the property is considered a total loss, then notification is required if the lesser of the estimated repair cost or its fair market value exceeds $25,000.
    g. An aircraft is overdue (45 minutes late or beyond its programmed fuel endurance time, whichever is less) and is believed to have been involved in an accident.
    h. Any flight crew who, under emergency authority, deviates from any Federal Aviation Regulation while on duty will immediately notify the Chief Pilot and describe the event through the DFI voluntary reporting tool. The crew member will include a description of the deviation taken and the reasons for it and as much detail as possible.

48. Generally in the event of any Emergency involving Doc's Friends or the public, aircraft or property?
    a. Take action to preserve life and limit injury
    b. Call for emergency assistance
    c. Move people away from danger
    d. Preserve aircraft and property
    e. Notify leadership
    f. Report accident or incident as required by regulation
    g. All of the above

49. What is an ERP?

50. In the event of an emergency we shall in act the ERP by doing the following:
    a. If there is potential harm to persons or property call 911
    b. Take Action to Prevent Further Injury or Damage
    c. Move people to a safe location
    d. Move vehicles and equipment to a safe location
    e. Notify appropriate authorities or control entities.
    f. Take action to diffuse a dangerous situation.
    g. Assess injury or damage for a situational report.
    h. Make written notes of the timeline and major factors.
    i. Preserve the area and evidence of equipment failure.
    j. Take photos and ask others to share their photos.
    k. Contact the appropriate DFI personnel.

51. Where are the safety reporting forms and box at to report any safety concerns?
    a. Bathroom
    b. Hangar
    c. Outside of the Director of Safety's office

52. Which way do you face going up and down the ladders/steps
    a. Away from
    b. Facing at all times

APPENDIX C

Inoperative instruments and equipment Maintenance Deferrals

FAR 91.213 - Inoperative instruments and equipment Maintenance Deferrals
DOC'S FRIENDS, INC., may apply any of the applicable elements noted in BOLD text. The Director of Operations and the Director of Maintenance or Mechanic Designee concurrence is Mandatory.

a) Except as provided in paragraph (d) of this section, no person may take off an aircraft with inoperative instruments or equipment installed unless the following conditions are met:

b) An approved Minimum Equipment List exists for that aircraft.

c) The aircraft has within it a letter of authorization, issued by the FAA Flight Standards district office having jurisdiction over the area in which the operator is located, authorizing operation of the aircraft under the Minimum Equipment List. The letter of authorization may be obtained by written request of the airworthiness certificate holder. The Minimum Equipment List and the letter of authorization constitute a supplemental type certificate for the aircraft.

d) The approved Minimum Equipment List must:

e) Be prepared in accordance with the limitations specified in paragraph (b) of this section; and

f) Provide for the operation of the aircraft with the instruments and equipment in an inoperable condition.

g) The aircraft records available to the pilot must include an entry describing the inoperable instruments and equipment.

h) The aircraft is operated under all applicable conditions and limitations contained in the Minimum Equipment List and the letter authorizing the use of the list.

i) The following instruments and equipment may not be included in a Minimum Equipment List:

j) Instruments and equipment that are either specifically or otherwise required by the airworthiness requirements under which the aircraft is type certificated and which are essential for safe operations under all operating conditions.

k) Instruments and equipment required by an airworthiness directive to be in operable condition unless the airworthiness directive provides otherwise.

l) Instruments and equipment required for specific operations by this part.

m) A person authorized to use an approved Minimum Equipment List issued for a specific aircraft under subpart K of this part, part 121, 125, or 135 of this chapter must use that Minimum Equipment List to comply with the requirements in this section.

n) Except for operations conducted in accordance with paragraph (a) or (c) of this section, a person may takeoff an aircraft in operations conducted under this part with inoperative instruments and equipment without an approved Minimum Equipment List provided—

o) The flight operation is conducted in a:

p) Rotorcraft, non-turbine-powered airplane, glider, lighter-than-air aircraft, powered parachute, or weight-shift-control aircraft, for which a master minimum equipment list has not been developed; or

q) Small rotorcraft, nonturbine-powered small airplane, glider, or lighter-than-air aircraft for which a Master Minimum Equipment List has been developed; and

r) The inoperative instruments and equipment are not:

s) Part of the VFR-day type certification instruments and equipment prescribed in the applicable airworthiness regulations under which the aircraft was type certificated;

t) Indicated as required on the aircraft's equipment list, or on the Kinds of Operations Equipment List for the kind of flight operation being conducted;

u) Required by §91.205 or any other rule of this part for the specific kind of flight operation being conducted; or

v) Required to be operational by an airworthiness directive; and

w) The inoperative instruments and equipment are

x) Removed from the aircraft, the cockpit control placarded, and the maintenance recorded in accordance with §43.9 of this chapter; or

y) Deactivated and placarded "Inoperative." If deactivation of the inoperative instrument or equipment involves maintenance, it must be accomplished and recorded in accordance with part 43 of this chapter; and

z) A determination is made by a pilot, who is certificated and appropriately rated under part 61 of this chapter, or by a person, who is certificated and appropriately rated to perform maintenance on the aircraft, that the inoperative instrument or equipment does not constitute a hazard to the aircraft.

aa) An aircraft with inoperative instruments or equipment as provided in paragraph (d) of this section is considered to be in a properly altered condition acceptable to the Administrator.

bb) Notwithstanding any other provision of this section, an aircraft with inoperable instruments or equipment may be operated under a special flight permit issued in accordance with §§21.197 and 21.199 of this chapter.

special circumstances make an award unjust.

§ 826.38 Board review.

Either the applicant or agency counsel may seek review of the initial decision on the fee application, or the Board may decide to review the decision on its own initiative, in accordance with subpart H of part 821 for FAA safety enforcement matters appealed under section 609 of the Federal Aviation Act. If neither the applicant nor agency counsel seeks review and the Board does not take review on its own initiative, the initial decision on the application shall become a final decision of the Board 30 days after it is issued. Whether to review a decision is a matter within the discretion of the Board. If review is taken, the Board will issue a final decision on the application or remand the application to the administrative law judge who issued the initial fee award determination for further proceedings.

§ 826.39 Judicial review.

Judicial review of final Board decisions on awards may be sought as provided in 5 U.S.C. 504(c)(2).

§ 826.40 Payment of award.

An applicant seeking payment of an award shall submit to the disbursing official of the FAA a copy of the Board's final decision granting the award, accompanied by a statement that the applicant will not seek review of the decision in the United States courts. Applications for award grants in cases involving the FAA shall be sent to: The Office of Accounting and Audit, AAA–1, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591. The agency will pay the amount awarded to the applicant within 60 days, unless judicial review of the award or of the underlying decision of the adversary adjudication has been sought by the applicant or any other party to the proceeding.

PART 830—NOTIFICATION AND REPORTING OF AIRCRAFT ACCIDENTS OR INCIDENTS AND OVERDUE AIRCRAFT, AND PRESERVATION OF AIRCRAFT WRECKAGE, MAIL, CARGO, AND RECORDS

Subpart A—General

Subpart B—Initial Notification of Aircraft Accidents, Incidents, and Overdue Aircraft

Subpart C—Preservation of Aircraft Wreckage, Mail, Cargo, and Records

Subpart D—Reporting of Aircraft Accidents, Incidents, and Overdue Aircraft

AUTHORITY: Independent Safety Board Act of 1974, as amended (49 U.S.C. 1101–1155); Federal Aviation Act of 1958, Public Law 85–726, 72 Stat. 731 (codified as amended at 49 U.S.C. 40101).

SOURCE: 53 FR 36982, Sept. 23, 1988, unless otherwise noted.

Subpart A—General

§ 830.1 Applicability.

This part contains rules pertaining to:

(a) Initial notification and later reporting of aircraft incidents and accidents and certain other occurrences in the operation of aircraft, wherever they occur, when they involve civil aircraft of the United States; when they involve certain public aircraft, as specified in this part, wherever they occur; and when they involve foreign civil aircraft where the events occur in the United States, its territories, or its possessions.

(b) Preservation of aircraft wreckage, mail, cargo, and records involving all civil and certain public aircraft accidents, as specified in this part, in the

United States and its territories or possessions.

[60 FR 40112, Aug. 7, 1995]

§ 830.2 Definitions.

As used in this part the following words or phrases are defined as follows:

Aircraft accident means an occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight and all such persons have disembarked, and in which any person suffers death or serious injury, or in which the aircraft receives substantial damage. For purposes of this part, the definition of "aircraft accident" includes "unmanned aircraft accident," as defined herein.

Civil aircraft means any aircraft other than a public aircraft.

Fatal injury means any injury which results in death within 30 days of the accident.

Incident means an occurrence other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operations.

Operator means any person who causes or authorizes the operation of an aircraft, such as the owner, lessee, or bailee of an aircraft.

Public aircraft means an aircraft used only for the United States Government, or an aircraft owned and operated (except for commercial purposes) or exclusively leased for at least 90 continuous days by a government other than the United States Government, including a State, the District of Columbia, a territory or possession of the United States, or a political subdivision of that government. "Public aircraft" does not include a government-owned aircraft transporting property for commercial purposes and does not include a government-owned aircraft transporting passengers other than: transporting (for other than commercial purposes) crewmembers or other persons aboard the aircraft whose presence is required to perform, or is associated with the performance of, a governmental function such as firefighting, search and rescue, law enforcement, aeronautical research, or biological or geological resource management; or transporting (for other than commercial purposes) persons aboard the aircraft if the aircraft is operated by the Armed Forces or an intelligence agency of the United States. Notwithstanding any limitation relating to use of the aircraft for commercial purposes, an aircraft shall be considered to be a public aircraft without regard to whether it is operated by a unit of government on behalf of another unit of government pursuant to a cost reimbursement agreement, if the unit of government on whose behalf the operation is conducted certifies to the Administrator of the Federal Aviation Administration that the operation was necessary to respond to a significant and imminent threat to life or property (including natural resources) and that no service by a private operator was reasonably available to meet the threat.

Serious injury means any injury which: (1) Requires hospitalization for more than 48 hours, commencing within 7 days from the date of the injury was received; (2) results in a fracture of any bone (except simple fractures of fingers, toes, or nose); (3) causes severe hemorrhages, nerve, muscle, or tendon damage; (4) involves any internal organ; or (5) involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface.

Substantial damage means damage or failure which adversely affects the structural strength, performance, or flight characteristics of the aircraft, and which would normally require major repair or replacement of the affected component. Engine failure or damage limited to an engine if only one engine fails or is damaged, bent fairings or cowling, dented skin, small punctured holes in the skin or fabric, ground damage to rotor or propeller blades, and damage to landing gear, wheels, tires, flaps, engine accessories, brakes, or wingtips are not considered "substantial damage" for the purpose of this part.

Unmanned aircraft accident means an occurrence associated with the operation of any public or civil unmanned aircraft system that takes place between the time that the system is activated with the purpose of flight and the time that the system is deactivated

at the conclusion of its mission, in which:

(1) Any person suffers death or serious injury; or

(2) The aircraft has a maximum gross takeoff weight of 300 pounds or greater and sustains substantial damage.

[53 FR 36982, Sept. 23, 1988, as amended at 60 FR 40112, Aug. 7, 1995; 75 FR 51955, Aug. 24, 2010]

Subpart B—Initial Notification of Aircraft Accidents, Incidents, and Overdue Aircraft

§ 830.5 Immediate notification.

The operator of any civil aircraft, or any public aircraft not operated by the Armed Forces or an intelligence agency of the United States, or any foreign aircraft shall immediately, and by the most expeditious means available, notify the nearest National Transportation Safety Board (NTSB) office[1] when:

(a) An aircraft accident or any of the following listed serious incidents occur:

(1) Flight control system malfunction or failure;

(2) Inability of any required flight crewmember to perform normal flight duties as a result of injury or illness;

(3) Failure of any internal turbine engine component that results in the escape of debris other than out the exhaust path;

(4) In-flight fire;

(5) Aircraft collision in flight;

(6) Damage to property, other than the aircraft, estimated to exceed $25,000 for repair (including materials and labor) or fair market value in the event of total loss, whichever is less.

(7) For large multiengine aircraft (more than 12,500 pounds maximum certificated takeoff weight):

(i) In-flight failure of electrical systems which requires the sustained use of an emergency bus powered by a back-up source such as a battery, auxiliary power unit, or air-driven generator to retain flight control or essential instruments;

(ii) In-flight failure of hydraulic systems that results in sustained reliance on the sole remaining hydraulic or mechanical system for movement of flight control surfaces;

(iii) Sustained loss of the power or thrust produced by two or more engines; and

(iv) An evacuation of an aircraft in which an emergency egress system is utilized.

(8) Release of all or a portion of a propeller blade from an aircraft, excluding release caused solely by ground contact;

(9) A complete loss of information, excluding flickering, from more than 50 percent of an aircraft's cockpit displays known as:

(i) Electronic Flight Instrument System (EFIS) displays;

(ii) Engine Indication and Crew Alerting System (EICAS) displays;

(iii) Electronic Centralized Aircraft Monitor (ECAM) displays; or

(iv) Other displays of this type, which generally include a primary flight display (PFD), primary navigation display (PND), and other integrated displays;

(10) Airborne Collision and Avoidance System (ACAS) resolution advisories issued either:

(i) When an aircraft is being operated on an instrument flight rules flight plan and compliance with the advisory is necessary to avert a substantial risk of collision between two or more aircraft; or

(ii) To an aircraft operating in class A airspace.

(11) Damage to helicopter tail or main rotor blades, including ground damage, that requires major repair or replacement of the blade(s);

(12) Any event in which an operator, when operating an airplane as an air carrier at a public-use airport on land:

(i) Lands or departs on a taxiway, incorrect runway, or other area not designed as a runway; or

(ii) Experiences a runway incursion that requires the operator or the crew

[1] NTSB regional offices are located in the following cities: Anchorage, Alaska; Atlanta, Georgia; West Chicago, Illinois; Denver, Colorado; Arlington, Texas; Gardena (Los Angeles), California; Miami, Florida; Seattle, Washington; and Ashburn, Virginia. In addition, NTSB headquarters is located at 490 L'Enfant Plaza, SW., Washington, DC 20594. Contact information for these offices is available at *http://www.ntsb.gov*.

of another aircraft or vehicle to take immediate corrective action to avoid a collision.

(b) An aircraft is overdue and is believed to have been involved in an accident.

[53 FR 36982, Sept. 23, 1988, as amended at 60 FR 40113, Aug. 7, 1995; 75 FR 927, Jan. 7, 2010; 75 FR 35339, June 22, 2010]

§ 830.6 Information to be given in notification.

The notification required in § 830.5 shall contain the following information, if available:

(a) Type, nationality, and registration marks of the aircraft;

(b) Name of owner, and operator of the aircraft;

(c) Name of the pilot-in-command;

(d) Date and time of the accident;

(e) Last point of departure and point of intended landing of the aircraft;

(f) Position of the aircraft with reference to some easily defined geographical point;

(g) Number of persons aboard, number killed, and number seriously injured;

(h) Nature of the accident, the weather and the extent of damage to the aircraft, so far as is known; and

(i) A description of any explosives, radioactive materials, or other dangerous articles carried.

Subpart C—Preservation of Aircraft Wreckage, Mail, Cargo, and Records

§ 830.10 Preservation of aircraft wreckage, mail, cargo, and records.

(a) The operator of an aircraft involved in an accident or incident for which notification must be given is responsible for preserving to the extent possible any aircraft wreckage, cargo, and mail aboard the aircraft, and all records, including all recording mediums of flight, maintenance, and voice recorders, pertaining to the operation and maintenance of the aircraft and to the airmen until the Board takes custody thereof or a release is granted pursuant to § 831.12(b) of this chapter.

(b) Prior to the time the Board or its authorized representative takes custody of aircraft wreckage, mail, or cargo, such wreckage, mail, or cargo may not be disturbed or moved except to the extent necessary:

(1) To remove persons injured or trapped;

(2) To protect the wreckage from further damage; or

(3) To protect the public from injury.

(c) Where it is necessary to move aircraft wreckage, mail or cargo, sketches, descriptive notes, and photographs shall be made, if possible, of the original positions and condition of the wreckage and any significant impact marks.

(d) The operator of an aircraft involved in an accident or incident shall retain all records, reports, internal documents, and memoranda dealing with the accident or incident, until authorized by the Board to the contrary.

Subpart D—Reporting of Aircraft Accidents, Incidents, and Overdue Aircraft

§ 830.15 Reports and statements to be filed.

(a) *Reports.* The operator of a civil, public (as specified in § 830.5), or foreign aircraft shall file a report on Board Form 6120.½ (OMB No. 3147-0001)[2] within 10 days after an accident, or after 7 days if an overdue aircraft is still missing. A report on an incident for which immediate notification is required by § 830.5(a) shall be filed only as requested by an authorized representative of the Board.

(b) *Crewmember statement.* Each crewmember, if physically able at the time the report is submitted, shall attach a statement setting forth the facts, conditions, and circumstances relating to the accident or incident as they appear to him. If the crewmember is incapacitated, he shall submit the statement as soon as he is physically able.

(c) *Where to file the reports.* The operator of an aircraft shall file any report with the field office of the Board nearest the accident or incident.

[53 FR 36982, Sept. 23, 1988, as amended at 60 FR 40113, Aug. 7, 1995]

[2] Forms are available from the Board field offices (see footnote 1), from Board headquarters in Washington, DC, and from the Federal Aviation Administration Flight Standards District Offices.